The Claims

1. A method for retrieving medical images from various sources and in different formats, to enable the creation of teaching files and research datasets, for the building of a personal medical image library, the method comprising:
   (a) retrieving a plurality of medical images from various sources;
   (b) storing the plurality of medical images in a database;
   (c) generating a database record for the teaching files and research datasets;
   (d) generating the teaching files and research datasets file;
   (e) saving the teaching files and research datasets into the database; and
   (f) generating at least one index of the teaching files and research datasets.

2. A method as claimed in claim 1, further including a searching mechanism for searching the teaching files and research datasets.

3. A method as claimed in claim 1, wherein the medical images are from at least one discipline selected from the group consisting of: radiology, nuclear medicine, dermatology, pathology, ophthalmology, cardiology, neurology, endoscopy, angiography, biomedicine, ECG, EEG, and EMG.

4. A method as claimed in claim 1, wherein the method is in accordance with MIRC schema.

5. A method as claimed in claim 1, further including anonymizing patient sensitive information, the patient sensitive information being able to be revealed to a generator of the teaching files and research datasets.

6. A method as claimed in claim 5, wherein the patient sensitive information is not revealed publicly.

7. A method as claimed in claim 5, wherein the anonymization process includes the replacing of each item of the sensitive information with an anonymization code.

8. A method as claimed in claim 7, wherein the anonymization code includes a prefix, a randomly generated number and a type.

9. A method as claimed in claim 8, wherein the prefix is a short string of characters representing the generator of the sensitive information; and the type represents nature of the sensitive information.

10. A method as claimed in claim 7, wherein a check is first performed to determine if the item of sensitive information has previously been anonymized and the anonymization code previously generated; and, if yes, retrieving and using the previously generated anonymization code.

11. A method as claimed in claim 5, wherein the sensitive information includes one or more items selected from the group consisting of: patient's name, patient ID, other patient's names, other patient IDs, patient's birth name, patient's address, patient's telephone numbers, patient's mother's birth name, region of residence, country of residence, military rank, branch of service, patient comments, additional patient history, referring physician's name, referring physician's address, referring physician's telephone numbers, and all other person names.

12. A method as claimed in claim 1, wherein, in step (c), ACR codes are entered as a result of system prompts.

13. A method as claimed in claim 12, wherein the ACR codes are used for the at least one index of the teaching files.

14. A method as claimed in claim 1, wherein indexing is by at least one selected from the group consisting of: title, abstract, keywords, authors, affiliations, contacts, patient information, radiological codes, image format, image compression status, image modality, anatomic location, and ACR codes.

15. A method as claimed in claim 2, wherein, for internal searching, patient sensitive information is revealed, and for external searching patient sensitive information is anonymized.

16. A method as claimed in claim 1, wherein after each medical image is retrieved in step (a) it can be viewed before being stored.

17. A method as claimed in claim 1, wherein all medical images are kept in their original format once retrieved.

18. A method as claimed in claim 17, wherein the formats include at least one selected from the group consisting of: AVW, HDR/IMG (Analyze format: version 8.0 and 7.5), BMP (Windows Bitmap format), DICOM (Digital Imaging and Communications in Medicine), GIF, JPEG, JPEG 2000, PNG, PNM, PPG, RGB, RGBA, SGI, TIFF, AVW, HDR/IMG (Analyze format: version 8.0 and 7.5), Animated GIF, MIRA, Muti-sliced TIFF, MOV, AVI, MP3, RM, and Waveform for ECG, EEG, EMG

19. A method as claimed in claim 18, wherein for two-dimensional medical images, two additional JPEG images are generated for ease of browsing using a web browser; and for other image formats, an additional thumbnail image may be generated.

20. A method as claimed in claim 19, wherein the two additional JPEG images are of the same size as thumbnail images.

21. Apparatus for retrieving medical images from various sources and in various formats for creating at least one teaching file and research dataset; the apparatus including a database, an image retrieval interface able to retrieve medical images from various sources and in different formats, an MIRC server, a server, and a graphic user interface for operation on a user's machine.

22. Apparatus as claimed in claim 21, wherein the database is a relational database for storage of all required information, including: database tables; database indexes; database scripts; and pointers to the medical images, teaching files and research datasets.

23. Apparatus as claimed in claim 21, wherein the server serves requests received from a user via the graphic user interface on a user's machine; the

graphic user interface being for providing access functions and file editing functions.

24. Apparatus as claimed in claim 21, wherein the image server includes at least one selected from the group consisting of: a two dimensional image loader, a three dimensional image loader, a multi-media loader and a telemetry loader.

25. Apparatus as claimed in claim 24, wherein the two-dimensional image loader is for retrieving two-dimensional still images.

26. Apparatus as claimed in claim 24, wherein the three-dimensional image loader is for retrieving three-dimensional still images.

27. Apparatus as claimed in claim 24, wherein the multi-media loader is for retrieving multi-media files.

28. Apparatus as claimed in claim 24, wherein the telemetry loader is for retrieving telemetry data.

29. Apparatus as claimed in claim 21, wherein the graphic user interface includes a PMIL client as a user interface able to run in a web browser or as a stand alone application on a user's machine, and provides MRIC editing functions.

30. Apparatus as claimed in claim 21, wherein the server includes an MIRC storage for providing an MIRC file storage service for the database and for the user's machine.

31. Apparatus as claimed in claim 30, wherein the MIRC server further includes an MIRC query to provide queries as defined by the MIRC scheme.

32. Apparatus as claimed in claim 21, wherein the at least one teaching file is in accordance with a Medical Imaging Resource Centre standard.

33. Apparatus as claimed in claim 21, wherein the formats include at least one selected from the group consisting of: AVW, HDR/IMG (Analyze format: version 8.0 and 7.5), BMP (Windows Bitmap format), DICOM (Digital Imaging and Communications in Medicine), GIF, JPEG, JPEG 2000, PNG, PNM, PPG,

RGB, RGBA, SGI, TIFF, AVW, HDR/IMG (Analyze format: version 8.0 and 7.5), Animated GIF, MIRA, Muti-sliced TIFF, MOV, AVI, MP3, RM, and Waveform for ECG, EEG, EMG.

34. Apparatus as claimed in claim 21, wherein all medical images are kept in their original format once retrieved.

35. A method as claimed in claim 33, wherein for two-dimensional medical images, two additional JPEG images are generated for ease of browsing using a web browser; and for other image formats, an additional thumbnail image may be generated.

36. A method as claimed in claim 35, wherein the two additional JPEG images are of the same size as thumbnail images.

37. Computer useable medium comprising a computer program code that is configured to cause a processor to execute one or more functions to perform the method of claim 1.